

NOMINATION REPORT

PLAQUING THE

St ALBANS BRIDGE

AS AN
HISTORIC ENGINEERING MARKER
for its Centenary

27 June 2003



The 1903 composite timber and steel De Burgh truss road bridge
over the Macdonald River, St Albans.

Prepared by Don Fraser
for the
Sydney Engineering Heritage Committee
Institution of Engineers, Australia
November 2002

CONTENTS

Statement of Significance	1
Nomination form	2
Locality maps	
R T A approval	
Proposed plaque words	3
Historic St Albans	4
Bridge drawings	
Site plan	
Evolution of the timber truss in bridge in NSW	6
Ernest Macartney de Burgh	9
EHA assessment sheets	10
Windsor and Richmond Gazette 1903 “New Bridge at St Albans”	

Statement of Significance

St Albans Bridge

The St Albans Bridge over the Macdonald River is listed on the NSW State Heritage Register as an item of State Significance (Roads and Traffic Authority's *Timber Bridge Management*, January 2002, p6).

- It has landmark aesthetic qualities and is a "gateway" structure to the village of St Albans which is now valued for its historical character. It is a structural element on a road which was once an important route north from Sydney but is now a popular tourist road.
- The bridge consists of two composite timber and steel trusses known as the de Burgh type, so named after its designer, E. M. de Burgh.
- The bridge is associated with the eminent Public Works engineer E M de Burgh.
- This type of truss was the fourth in the five-stage design evolution (1861-1905) of timber truss road bridges in New South Wales. They were economical structures that utilised the strength and durability of Australian hardwood timbers thereby facilitating the expansion of the colonial road network that brought significant social and commercial benefits to New South Wales.
- The composite de Burgh truss was specifically designed for general use in the bridge programme following J A McDonald's introduction of the technology at Cowra in 1893. De Burgh adapted the American Pratt truss design so that the distribution of timber and steel effectively matched the forces in the truss.
- The resulting composite timber and steel truss was a significant technical improvement over the preceding timber truss types. It was a notable innovation in Australia's engineering history and was sound in principle. However, De Burgh's design incorporated the American practice of steel pins along the bottom steel member, a structural detail that was superseded in 1905 by a return to conventional riveted joints as in Harvey Dare's rework of the Allan truss into a composite steel and timber truss. Of the 20 de Burgh truss bridges built between 1899 and 1905, twelve survive, as at December 2002, with five on the NSW State Heritage Register.
- The St Albans Bridge has the largest surviving de Burgh truss spans at 36.0m (118 feet) and a unique river pier consisting of a braced steel trestle with a pair of tapering load bearing tubes to better withstand the ravages of the Macdonald River.
- It is an excellent representative example of a de Burgh truss bridge and with proximity to Sydney its technical excellence can be readily appreciated.
- The St Albans Bridge is highly valued by the local community and broader based interest groups.

Nomination Form

Administrator
Engineering Heritage Australia
The Institution of Engineers, Australia
Engineering House
11 National Circuit
BARTON ACT 2600

THE AUSTRALIAN HISTORIC ENGINEERING PLAQUING PROGRAM

Nominating Body: Engineering Heritage Committee, Sydney Division, I E Aust.

The following work is nominated for a:

~~National Engineering Landmark~~

Historic Engineering Marker

Name of work: St Albans Bridge

Location, including address and map reference if possible: At St Albans, NSW

Owner: Hawkesbury City Council

Operator: Roads and Traffic Authority, NSW (maintenance)

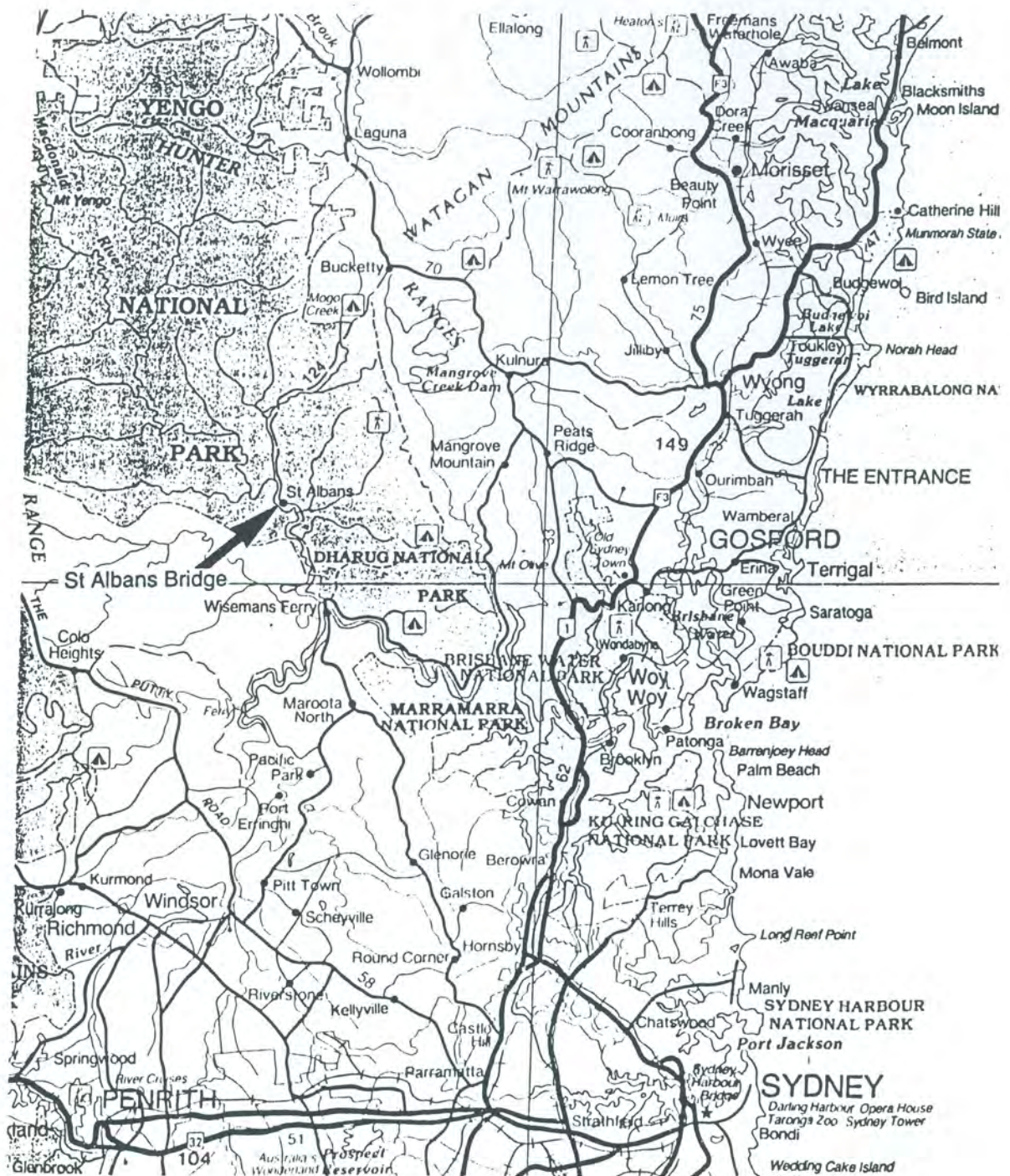
The owner and operator have been advised of this nomination. The owner has agreed through direct contact with local committee and the operator has supplied a written agreement, attached.

Access to site: Open access, main road over the Macdonald River

..... Glenn Rigden.....

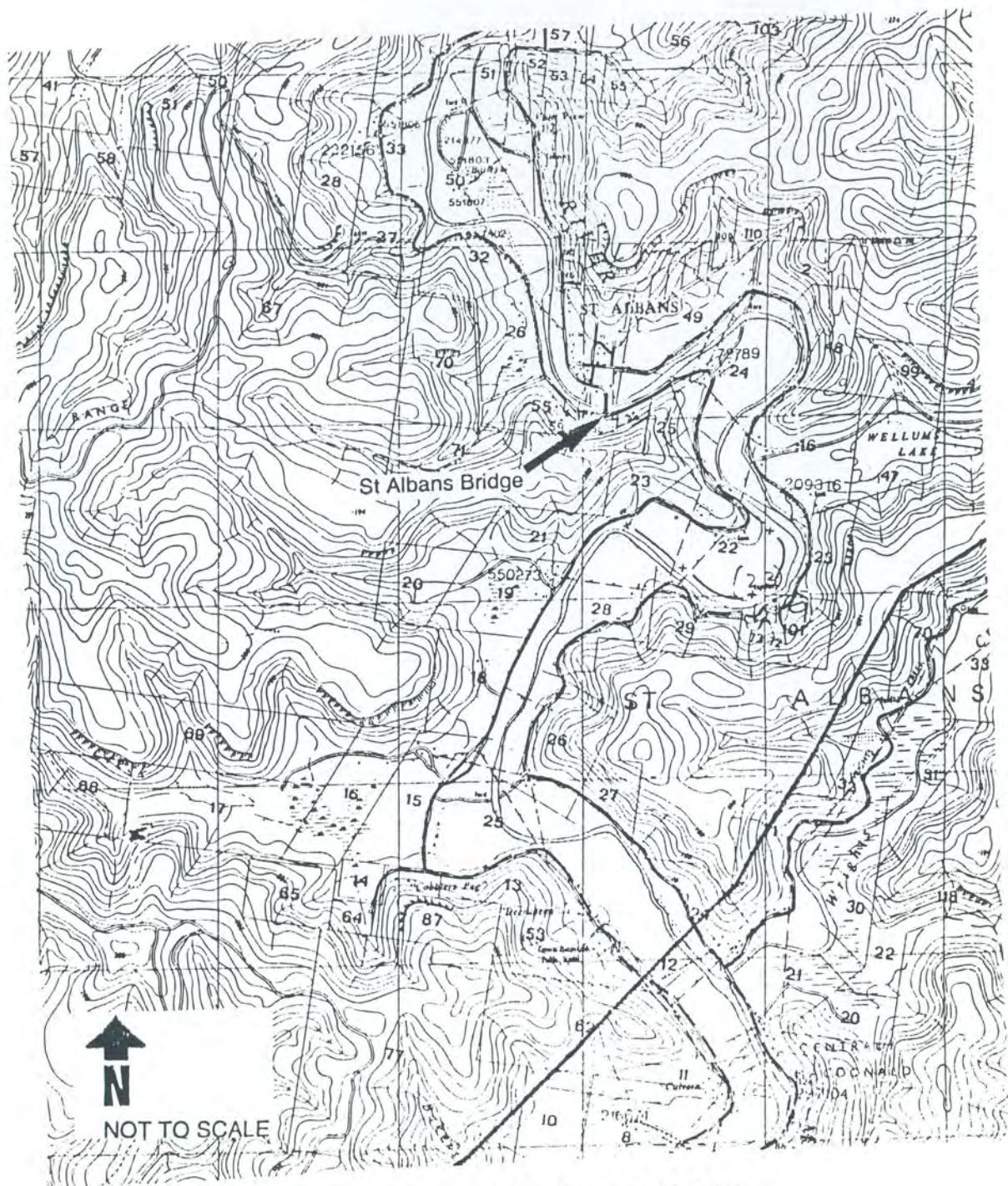
Chair of Nominating Committee

Date:6 November 2002.....



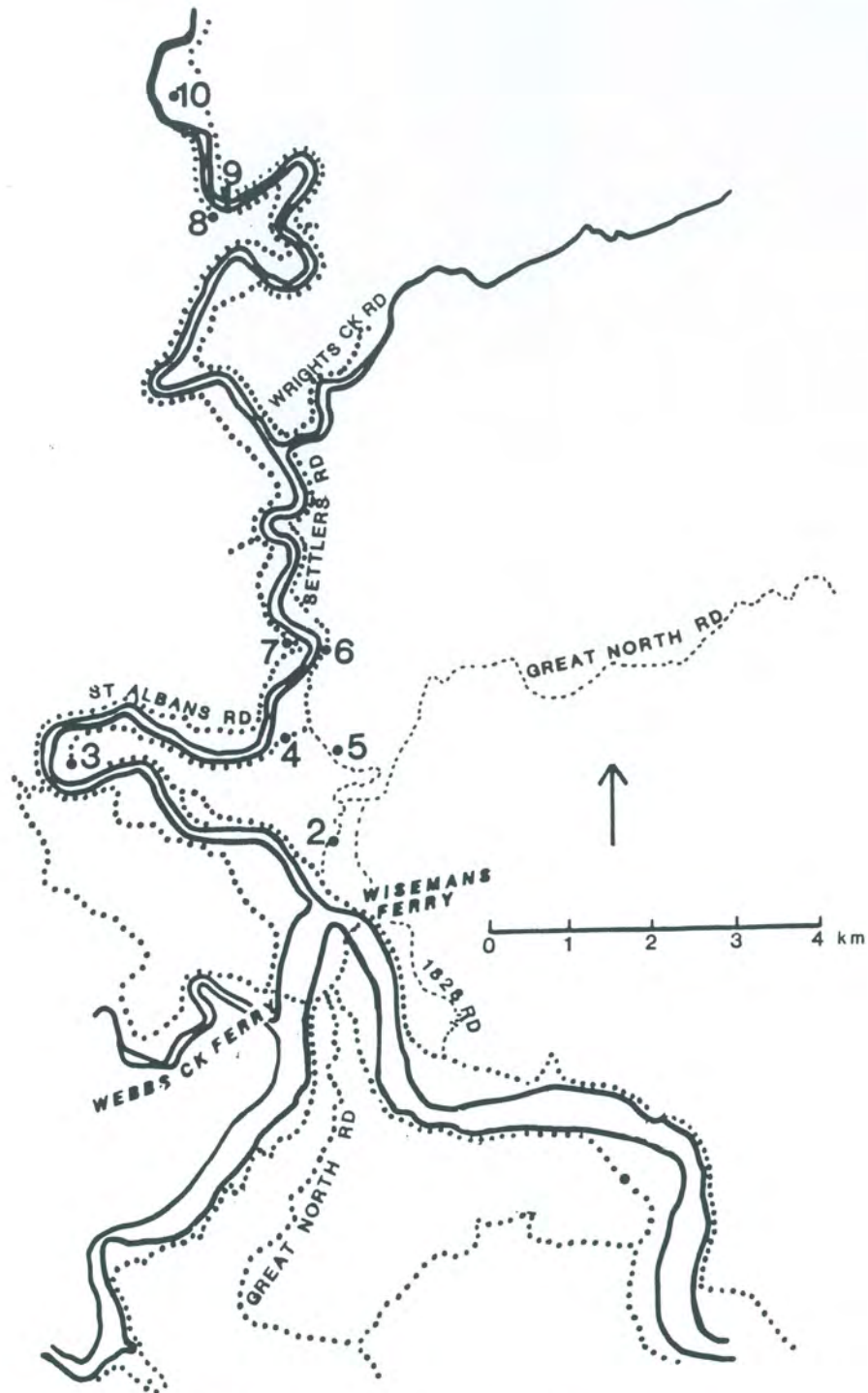
Map 1 Sydney and St Albans

Courtesy Godden Mackay Logan



Map 2 St Albans and the Macdonald River

Courtesy Godden Mackay Logan



Map 3 Macdonald Valley and its historic sites.
 2 Hangmans Rock; 3 Victoria Inn; 4 Primrose Hill; 5 Shepherds Gully;
 6 Books Ferry; 7 St Joseph's Church ruin; 8 Old Court House;
 9 Settlers Arms Inn and St Albans Bridge; 10 Industrious Settler.

Courtesy Dharug & Lower Hawkesbury Historical Society



**Roads and Traffic
Authority**
www.rta.nsw.gov.au

17 JUN 2002

Mr Don Fraser
Secretary
Engineering Heritage Committee Sydney
The Institution of Engineers Australia
PO Box 2044
Rose Bay North NSW 2030.

Centennial Plaza
260 Elizabeth Street
Surry Hills NSW 2010
Telephone (02) 9218 6888
PO Box K198
Haymarket NSW 1238
DX 13 Sydney

Dear Mr Fraser,

Plaquing the St Albans Bridge

Reference is made to your letter dated 15 May 2002 addressed to the General Manager, Infrastructure Maintenance regarding the commemorative plaquing of the Bridge over the Macdonald River at St Albans.

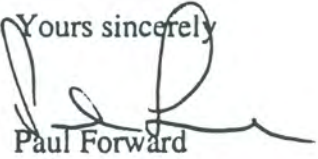
I agree in principle to the Institution of Engineer's proposal for the commemorative plaquing of the Bridge at St Albans at its centenary of opening on 27 June 2003.

Mr Neil Forrest, Asset Manager, Sydney Region is nominated as the contact officer for this project. He will advise on a suitable location and will arrange for installation of the plaque. Further he will be the contact regarding the timing and any arrangements regarding the unveiling ceremony for the plaque.

Mr Forrest's contact details are given below:

Address: 83 Flushcombe Rd.
Blacktown NSW 2148
Telephone: (02) 8814 2933
Facsimile: (02) 8814 2111

Yours sincerely


Paul Forward
Chief Executive

CC: Asset Manager, Sydney Region

PROPOSED PLAQUE WORDS

I E Aust
Logo

HISTORIC ENGINEERING MARKER

St Albans Bridge

This bridge, built by John Ahearn & Son and opened on 27 June 1903, has two de Burgh type composite timber and steel trusses and a distinctive steel trestle, all designed by the eminent Public Works engineer E M de Burgh. This type of road bridge was part of the design evolution (1861-1905) of the timber truss road bridge in NSW and was the first composite truss in the bridge program. It was a significant technical advance over the preceding types. The bridge has the longest de Burgh truss spans, 36 metres, and is a local landmark. (96)

**Dedicated for its centenary by
The Institution of Engineers, Australia,
Roads and Traffic Authority NSW and
Hawkesbury City Council, 28 June 2003**

NB the centenary is Friday 27 June 2003 but the ceremony is planned for Saturday 28 hence the above plaque wording ends with day, month and year of the dedication.

The following alternative wording deletes the Dedication words and ends with the centenary date.

This bridge constructed by John Ahearn & Son was opened on 27 June 1903. The two 36 metre long composite timber and steel trusses are of the de Burgh type, named after the designer E M de Burgh, the eminent Public Works engineer. This type of truss was, the first composite truss used in the bridge program, the fourth stage in the design evolution from 1861 to 1905 of the timber truss road bridge and was a significant advance on previous types. The bridge has the longest spans of any de Burgh truss bridge and is a local landmark structure. (101).

The Institution of Engineers, Australia,
Roads and Traffic Authority NSW and
Hawkesbury City Council, 27 June 2003

Historic St Albans

The village of St Albans is 100 kms North West of Sydney (Map 1) on the banks of the Macdonald River about 20 kms from its confluence with the Hawkesbury River (Maps 2 and 3). Official settlement of the fertile river flats, downstream of St Albans, began in the 1830s and the produce of wheat, vegetables, fruit and livestock served an eager market for the fast-growing and hungry population of Sydney. Conveyance was by boat direct to Sydney via the sea route downstream along the Hawkesbury River, or upstream to Windsor then by road. By 1841 the valley had a population of over 1,000 when St Albans was gazetted as a town, but not officially declared until 1885.

The good times of the 1830s and 1840s led to the construction of many substantial stone buildings. Some excellent examples survive, such as the 1832 Victoria Inn and the 1836 Settlers Arms Inn (figure 4). The 1890 stone Court House also survives. But the dominant form of construction was the traditional timber slab hut both for residences and farm buildings. Many are still standing in the valley (figure 4).

However, prosperity was short lived because the Macdonald River was a mountain stream subject to fast-flowing destructive floods which deposited sand rather than humus material on the farming land. By the 1870s, river craft could not reach St Albans due to silting of the river. There began a slow decline that continued for 100 years.

In 1884 there was still sufficient activity to warrant a river crossing at St Albans to link both sides of the valley and a 3-span timber truss bridge of the OLDPWD type (figure 5a) was built a short distance upstream (figure 6) of the new 1903 bridge. Unfortunately, the first bridge suffered the ravages of the Macdonald River and was severely damaged by the 1889 flood and remained in a precarious state of repair until replaced in 1903, figure 5b.

Despite the onset of decline, there were many travellers passing through St Albans heading north to Wollombi (Map 1) and beyond to the Hunter District. The earlier "Great North Road" at Wisemans Ferry had been abandoned as far as Bucketty and the future Pacific Highway via Peats Ferry was still a primitive track. All this changed when the 1889 Hawkesbury River Railway linked Sydney and Newcastle and by the 1930s the Pacific Highway had become a good trafficable road. Travellers preferred the easterly routes to the north.

St Albans and the Macdonald Valley slipped into relative isolation, but were never forgotten. Since the 1970s hobby-farmers have taken up much of the land, as well as those seeking solitude in a beautiful valley. The most important industry is now tourism with a rediscovery of the history and heritage of an early colonial environment.

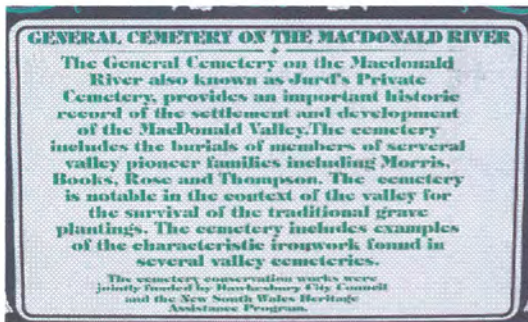
The entire landscape has been classified by the National Trust and there are also many buildings in the valley that are classified. There is strong community awareness of this development and the place that the 1903 de Burgh truss bridge has in it.



Victoria Inn c1832 and Settlers Arms Inn 1836



Colonial timber slab construction



Pioneer Cemetery

Figure 4 Macdonald Valley historic sites.

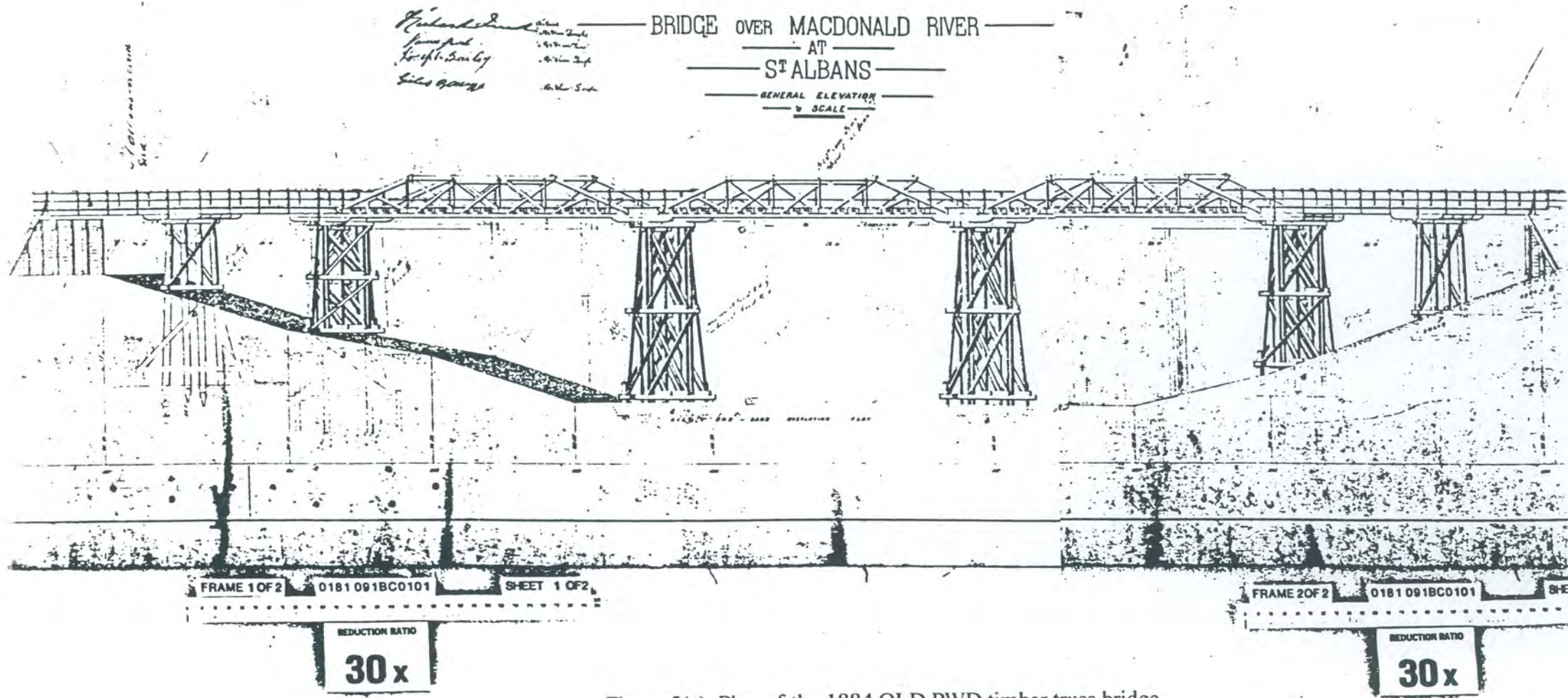


Figure 5(a) Plan of the 1884 OLD PWD timber truss bridge.

DEPARTMENT OF PUBLIC WORKS
Roads and Bridges Branch

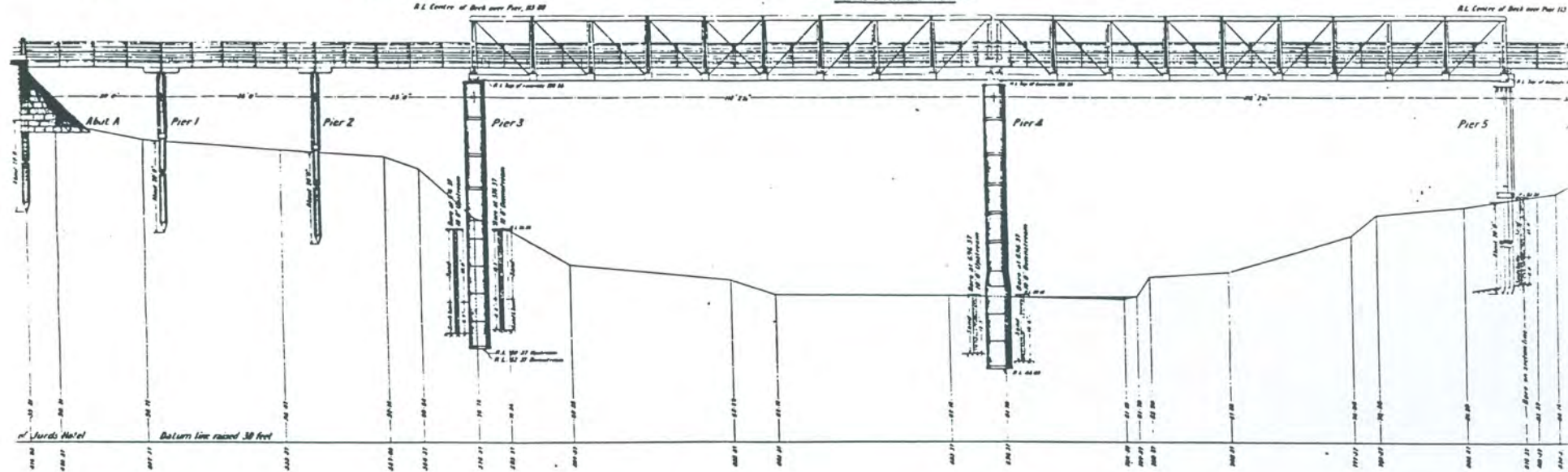
BRIDGE OVER MACDONALD RIVER AT ST ALBANS

N^o 1

*Bridge over
Macdonald River
at St Albans*

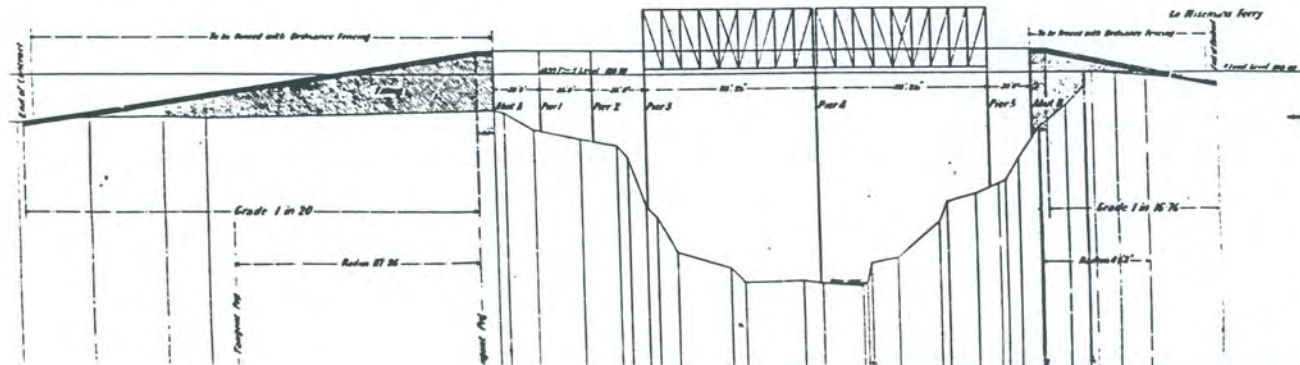
GENERAL ELEVATION

SCALE 8 Feet to an Inch



GENERAL SECTION

SCALE
Horizontal 80 Feet to an Inch
Vertical 10 Feet to an Inch



Plan of Site

Scale 80 Feet to an Inch

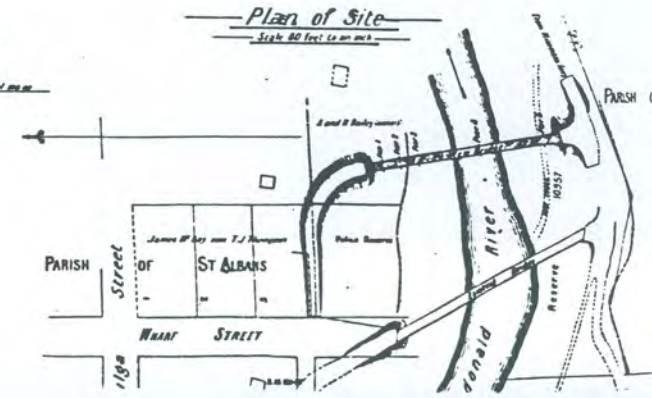


Figure 5(b) Plan of the 1903 de Burgh composite truss bridge.

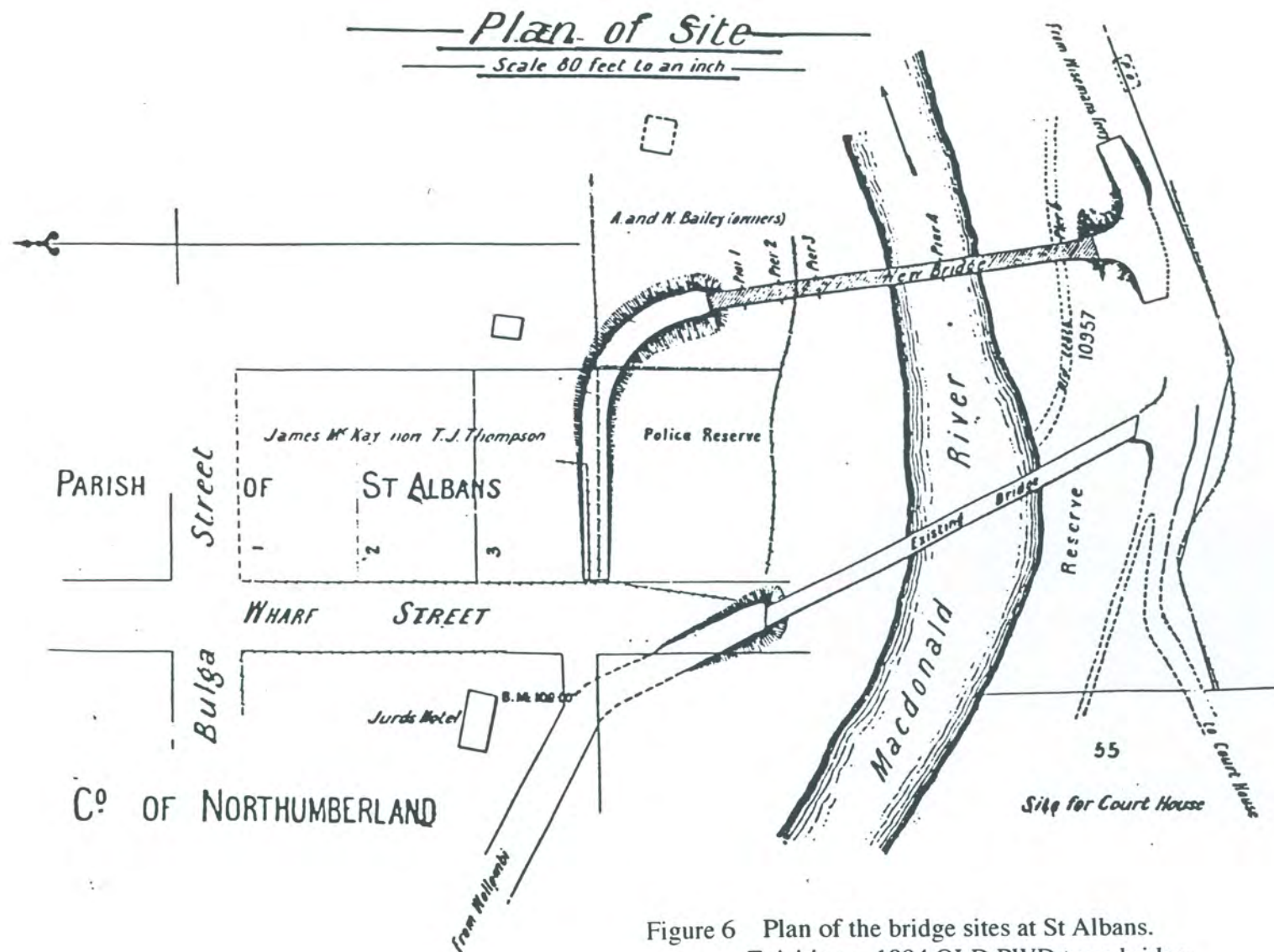


Figure 6 Plan of the bridge sites at St Albans.
Existing = 1884 OLD PWD truss bridge,
New = 1903 de Burgh truss bridge.

Evolution of the timber truss bridge in NSW

The truss, unlike the suspension cable/vine, the rock arch, the beam/log and the dome/cavern, has no equivalent in nature. It is a creation by man, first formalised by the sixteenth century Italian architect Andrea Palladio (1508-1580), figure 7.

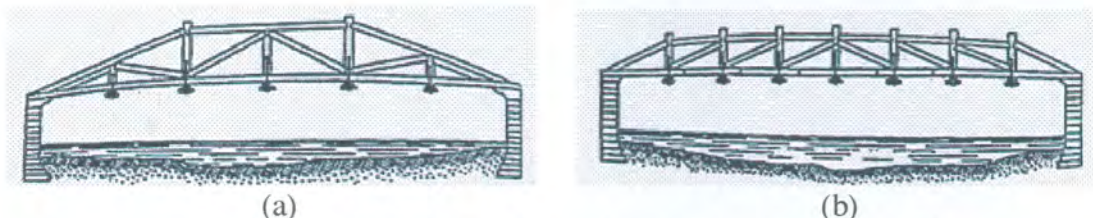


Figure 7 Palladio's drawings of timber truss bridges c1550.

The truss is a spatial assembly of relatively short members to form a much larger structure that has a high load capacity/weight ratio. It is particularly efficient for spans exceeding 30 metres (100 feet) and up to 610 metres (2,000 feet). Most of the great bridges of the world are steel trusses.

In New South Wales, after the establishment of the Department of Public Works (PWD) in 1859, a standard timber truss bridge design was developed for road bridges by Chief Engineer and Commissioner for Roads, William C Bennett. It was a relatively low cost bridge, being constructed from local hardwood timbers, such as ironbark, rather than the expensive imported iron. Bennett's design, modelled on the Palladio truss in figure 7(a), has become known as the "Old PWD Truss", figure 8(a), and it allowed a rapid expansion of the burgeoning road network from 1870 to 1884. Only two Old PWD truss bridges remain in New South Wales, both classified as of State Significance.



(a) Old PWD truss



(b) A McDonald truss

Figure 8 The modified Palladio trusses 1870 to 1894.

The OLD PWD truss was the first in a five stage evolution of the timber truss road bridge in New South Wales, their names were OLD PWD, McDonald, Allan, de Burgh and Dare. The four following the OLD PWD truss have been named after their designers, all eminent engineers of the NSW Department of Public Works (PWD).

However, the old design had some structural faults and was expensive to maintain. In 1884 John A McDonald, the PWD Engineer for Bridges, produced an improved standard design to rectify the worst of these problems and to cater for increased loadings. His design has become known as the McDonald Timber Truss, figure 8(b), and five such bridges survive, all of State Significance. He also pioneered the new technology of composite construction whereby a mix of timber and steel members was used to their best structural advantage. The 1893 bridge over the Lachlan River at Cowra had three large composite truss spans. After its replacement in 1986, a sample truss was mounted in the riverside park but had to be demolished for safety reasons in 1995.

In the early 1890s Assistant Bridge Engineer, Percy Allan, began a comprehensive redesign of the timber truss bridge using data on the strengths of Australian timbers from Prof Warren's testing program at Sydney University and the experiences in constructing and maintaining the previous designs. He chose the American Howe truss, an arrangement anticipated by Palladio 400 years earlier, figure 7(b). In his cost-effective design, now known as the "Allan Truss", he used marketable lengths of timber, minimised the adverse effects of water holding in joints, countered the effects of the high shrinkage of Australian hardwoods and devised ways of replacing defective members without taking the bridge out of service. His new design came into service in 1894 with the ability to carry 50% more load than its predecessors but with 20% less material. Approximately 35 Allan truss bridges survive with 11 of State Significance.

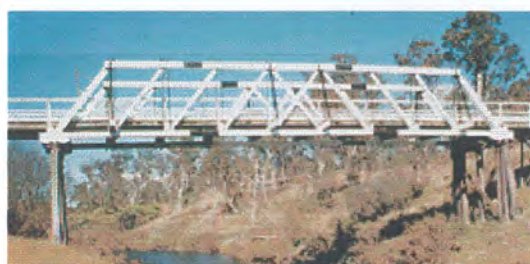


Figure 9 The clean simple lines of an Allan truss, easy to construct and repair.



Figure 10 A general view of a de Burgh composite truss and a closer view of a pinned joint with new replacement timbers.

Another member of this famous team of PWD bridge engineers, which included Harvey Dare and J J C Bradfield, was E M de Burgh. Following the concept of composite construction, pioneered by J A McDonald (1893 above), de Burgh developed it into a viable standard design in 1899. He used the American Pratt truss with timber for the top chord and the vertical members, iron rods for the diagonals and a bottom chord member made from structural steel sections plus the American practice of using single steel pins at each of the bottom chord joints, figure 10.

The first two de Burgh composite bridges at Queanbeyan and Inverell in 1899 (both replaced) had sloping end members as in the Howe/Allan trusses. This was an unnecessary detail for the Pratt arrangement of members and so vertical ends, see cover picture, were adopted for all subsequent de Burgh truss bridges. The St Albans Bridge is an excellent example and it has the largest surviving spans for this type of bridge.

This new design, which now bears his name, promised great economies in maintenance, figure 10. However the inclusion of pinned joints, an American practice that had become a hindrance to certain aspects of maintenance and future strengthening. Consequently, the design was used in NSW only for a short period 1900 to 1905 during which time twenty such bridges were built. Twelve survive with five being of State Significance including the 1903 bridge at St Albans.

Despite the drawbacks of the de Burgh design, the advantages of composite construction were clearly recognised and Harvey Dare reworked the Howe/Allan truss into a composite structure with conventional riveted joints. It was the last of the five stages in the evolution of timber truss bridges in New South Wales. By 1935, with in excess of 400 timber truss bridges having been built, they became a characteristic feature of the New South Wales road network, so much so that it was referred to as "the timber bridge State".

But during the 1920s, the increasing availability of locally produced steel allowed a gradual changeover to steel truss construction.



Figure 11 A typical composite Dare truss of the Howe type with timber diagonals and steel bottom chord.

Ernest Macartney de BURGH



E M de Burgh (1863-1929) was one of Australia's foremost engineers of the late colonial period and the early 20th century. He was born in Dublin, Ireland and received his engineering education at the Royal College of Science. At age 22 he arrived in Melbourne then onto Sydney where he joined the New South Wales Department of Public Works on 30 April 1885. He was to specialise in the design and construction of bridges, water-supply schemes and dams.

By 1901, when was appointed Engineer for Bridges, he had been associated with many major bridges such as those at Wilcannia, Wentworth, Mulwala, Swan Hill, Wagga Wagga, Singleton, Morpeth, Kempsey, Murwillumbah and Kangaroo Valley. Some of these, including the latter, have been plaqued by the Institution of Engineers, Australia. He had also developed the composite timber and steel truss that now bears his name and was a member of the Sydney Harbour Bridge Advisory Board.

In 1903 he was appointed Principal Engineer for rivers, water-supply and drainage and was sent to England and France to study dam construction and water-supply. On his return he was given special responsibility for the design and construction of Cataract Dam, first dam of the Upper Nepean Water-supply Scheme for Sydney, and was associated with the Burrinjuck Dam, both are National Engineering Landmarks.

In 1913 he was appointed Chief Engineer for Water-supply and Sewerage and assumed responsibility for the other three dams of the Upper Nepean Scheme (Cordeaux, Avon and Nepean), for Newcastle's water-supply (Chichester Dam) and for Broken Hill (Umberumberka Dam). He represented NSW on the Conference of Engineers whose Report of 1913 led to the construction of Hume Dam and weirs along the River Murray. These works were collectively designated as a National Engineer Landmarks in 2001.

Ernest Macartney de Burgh was regarded as one of the ablest civil engineers in Australia whose achievements had been recognised internationally. He had twice won the prestigious Telford premium of the Institution of Civil Engineers, London.

**Engineering Heritage Australia
Plaques Nomination Assessment Form**

Item Name	St Albans Bridge
Location	St Albans, NSW
Suburb/Nearest Town	Wisemans Ferry
State	New South Wales
Other/Former Names	
Local Govt. Area	Hawkesbury City Council
Owner	Hawkesbury City Council/RTA maint'
Current Use	Road bridge for MR 181
Former Use	Road bridge
Assessed Significance	State
Statement of Significance	<p>It has landmark aesthetic qualities and is a "gateway" structure to the village of St Albans which is now valued for its historical character. It is a structural element on a road which was once an important route north from Sydney but is now a popular tourist road.</p> <p>The bridge consists of two composite timber and steel trusses known as the de Burgh type, so named after its designer, E. M. de Burgh.</p> <p>The bridge is associated with the eminent Public Works engineer E M de Burgh.</p> <p>This type of truss was the fourth in the five-stage design evolution (1861-1905) of timber truss road bridges in New South Wales. They were economical structures that utilised the strength and durability of Australian hardwood timbers thereby facilitating the expansion of the colonial road network that brought significant social and commercial benefits to New South Wales.</p> <p>The composite de Burgh truss was specifically designed for general use in the bridge program following J A McDonald's introduction of the technology at Cowra in 1893. It was an adaptation of the American Pratt truss design such that it effectively matched the distribution of timber and steel to the forces in the truss.</p>

	<p>The resulting composite timber and steel truss was a significant technical improvement over the preceding timber truss types. It was a notable innovation in Australia's engineering history and was sound in principle. However, De Burgh's design incorporated the American practice of steel pins along the bottom steel member, a structural detail that was superseded in 1905 by a return to conventional riveted joints as in Harvey Dare's rework of the Allan truss into a composite steel and timber truss. Of the 20 de Burgh truss bridges built between 1899 and 1905, twelve survive, as at December 2002, with five on the NSW State Heritage Register.</p> <p>The St Albans Bridge has the largest surviving de Burgh truss spans at 36.0m (118 feet) and a unique river pier consisting of a braced steel trestle with a pair of tapering load bearing tubes to better withstand the ravages of the Macdonald River.</p> <p>It is an excellent representative example of a de Burgh truss bridge and with proximity to Sydney its technical excellence can be readily appreciated.</p> <p>The St Albans Bridge is highly valued by the local community and broader based interest groups.</p>
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ENGINEERING HERITAGE AUSTRALIA

Historical Notes:	<p>Timber truss road bridges played a significant role in the expansion and improvement of the NSW road network from 1861 to 1935, particularly to the end of World War 1.</p> <p>Successive, financially troubled colonial governments applied pressure to the Department of Public Works to produce as much road and bridge work for as little cost as possible, using local materials such as the renown hardwoods of the North Coast.</p> <p>Timber truss bridges, such as the de Burgh type, met this criterion.</p>		
Designer:	Ernest Macartney de Burgh		
Maker/Builder:	John Ahearn & Son		
Year Started	1901	Year Completed: 1903	Circa:
Physical Description:	Two de Burgh type composite timber and steel trusses each 36 m spans supported by iron piers consisting of twin tapered tubes.		
Physical Condition	Good		
Modification Dates:	During 1997/98 the original timber deck system was replaced by galvanised steel cross girders and a stress laminated timber running deck.		

ENGINEERING HERITAGE AUSTRALIA

<p>SIGNIFICANCE</p> <p>Historical Phase</p>	<p>In order to meet an 1861 government decree to use as much local materials in road bridge works as possible, Public Works engineers developed a series of five types of timber truss road bridges (1861-1905). In excess of 400 of these bridges were built which were a significant contribution to the expansion of and improvement to the road network in NSW.</p> <p>The fourth type of timber truss bridge in 1899, was the de Burgh type, a composite timber and steel structure.</p>
<p>Historical Association:</p>	<p>The de Burgh type composite timber truss road bridges were named after its designer, the eminent Public Works engineer E M de Burgh (1863-1929). He specialised in bridges and water supply and irrigation dams. He became one of Australia's ablest civil engineers whose achievements were recognised internationally, twice receiving the prestigious Telford premium, Institution of Civil Engineers, London.</p>
<p>Creative or Technical Achievement:</p>	<p>The St Albans Bridge has the two largest de Burgh truss spans, 36 m. Based on the American Pratt truss, it was a technical advance over its predecessors but the American practice of pinned joints was a hindrance to maintenance and strengthening. It was superseded in 1905 by the Dare truss.</p>
<p>Research Potential:</p>	<p>The clean open form of construction of the bridge exhibits the technical excellence of its design and details.</p>
<p>Social:</p>	<p>The bridge is highly valued by the local community, and tourists who regularly visit historic St Albans.</p> <p>The bridge is a landmark structure in the district and a "gateway" to the village of St Albans.</p>
<p>Rarity:</p>	<p>Rare in the Sydney region, and has rare technical features.</p>
<p>Representativeness:</p>	<p>Highly representative of de Burgh truss construction.</p> <p><i>with easy reach of Sydney</i></p>
<p>Integrity/Intactness:</p>	<p>Has the original truss fabric with a modern stress laminated timber deck and galvanised steel cross-girders.</p>
<p>References:</p>	<p>Department of Main Roads, <i>Timber Truss Maintenance Handbook</i>, Sydney 1987.</p> <p>Fraser D J, <i>Timber Bridges of New South Wales</i>, Multi-Disciplinary Transactions, I E Aust 1985.</p> <p>Godden Mackay Logan, <i>St Albans Bridge Conservation Management Plan</i>, Sydney, Feb 2000.</p> <p>Windsor and Richmond Gazette, <i>New Bridge at St Albans</i>, Vol. 15, No. 778, 4 July 1903.</p>

ENGINEERING HERITAGE AUSTRALIA				
Listings	Name:	Title:	Number:	Date:
	Register of the National Estate	No	Transferred to SHR	
	State Heritage Register NSW	Yes	Item 01480	
	National Trust of Australia	No		
	Hawkesbury City Council LEP	No		

Item Name:	St Albans Bridge
Location:	St Albans, NSW
Image/s:	<i>Cannot insert images into this space, hence see below.</i>
Captions:	The de Burgh truss bridge over Macdonald River, St Albans. E M de Burgh



Windsor and Hawkesbury

Gazette.

THE HAWKESBURY DISTRICT NEWSPAPER.

REGISTERED AT THE GENERAL POST OFFICE, SYDNEY, FOR TRANSMISSION BY POST AS A NEWSPAPER.

No. 778

WINDSOR, SATURDAY, JULY 4, 1903.

PRICE 3D.

Vol. 15

NEW BRIDGE AT ST. ALBANS.

Official Opening by Hon. E. W. O'Sullivan.

A GREAT BANQUET.

A POLITICAL PRONOUNCEMENT.

"Calamity Howlers" and "Bullock Dray" Party.

Mr. John Norton, M.P., on Prosleytism.

SATURDAY last was a glorious day in St. Albans, and the charming hamlet has perhaps never before had so much pleasurable excitement crowded into a few hours. Everybody knows that a new bridge has recently been built over the Macdonald River at St. Albans—and they know also that the structure was obtained only through the energy and instrumentality of the members of the Northumberland. Mr. John Norton.

10 p.m., and after spending the night at Host Kelly's Hawkesbury Hotel, drove over to St. Alban's next morning. Mr. J. H. Bloome, with his photographic apparatus, also went down in advance of the parliamentary party, and following in their wake were several other residents of Windsor and district, including Messrs G. McCauley, J.P., W. C. Barker, and Palmer Bechell. The "Hotel among us" taken

of awful old convict days. The serpentine road was formed by "Government" men; four huge pillars of stone, rising up from the gully, that set off the retaining wall at intervals on the mountain side were built by a convict, and for this work he got his pardon. Further gruesome detail is afforded in the old "Court House" on the road side, where many a poor wretch was ordered to be flogged within an inch of his life for some paltry offence. The "Court House" is formed by a cavity in a large rock, which had been fashioned to suit the requirements of the dispensers of 'justice' of the time. The temple is approached by a flight of steps hewn in the rocks, and there are the judge's seat, the desk for the deposition clerk, and the prisoner's dock, all cut in the rock.

Further on may be seen what remains of the 'sheep-yard.' This is where

Arthur Jurd, J. Robinson, W. Bernsderff, W. and Aaron Thompson, and Amos Jurd, and the picture they made did infinite credit to their taste and decorative abilities. Shortly after arrival a very large half-circle group was photographed by Mr. Bloome. In the centre of the group sat the Minister for Works, and near him were Mr. Norton and the other visiting members of Parliament.

ON THE BRIDGE.

Then a crowd numbering between 800 and 400 repaired to the centre of the bridge.

Mr. Albert Wilson, J.P., briefly welcomed the Minister for Works, and said he had been deputed to read the following address:—"To the Hon. E. W. O'Sullivan, Minister for Works,—We, the residents of the town and district of St. Albans, beg to extend to you a hearty welcome upon this occasion of your visit. In requesting you

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The party who travelled by road from Windsor could not pass the Ferry without dropping in on Mr. Peter Kelly, who has made the historic old Hawkesbury Hotel such a popular house of call. The Hon. B. W. O'Sullivan and his party arrived there about 11 a.m., and had dinner at the hotel, and the rest of the travellers also dined there, and then all pushed on to St. Albans. The 36 mile drive was anything but monotonous. What might have been a tedious and tiring journey was brightened and seemed to be shortened by the company of jovial spirits. And the sights to be seen are so grand and varied that one is more than compensated for the little inconveniences of the trip. First you are bowling along through rich and fertile land, heavily timbered for the most part but with here and there an orchard that tells eloquently of the thrift and industry of the settlers. The orange trees are literally loaded with golden fruit, and we hope they represent a veritable golden harvest for the owners. — Then you pass through belts

Further on may be seen what remains of the 'sheep-yard.' This is where the unhappy hordes of convicts were huddled together at night, and where they were flogged unmercifully on the slightest provocation, and often at the whim or caprice of some brutal man or woman. We are told one story of the "system," which makes the soul of every human being revolt against the cruelties of the inhuman beasts who were permitted to live and practice their atrocities in the early days of the settlement. It is said that a rascal was in the act of flogging one of the road gang for some trifling misdemeanor, when the flogger's wife came along with a child. The child laughed as the cruel cat-o-nine tails came down across the back of the writhing sufferer, and when the job was finished the cold-blooded wife asked her brutal husband to "give him another fifteen to please the child." The work seemed congenial to the brute, and he straightway gave his victim fifteen more stripes "to make the nipper laugh." Countless tales of similar cruelty are told of the early days of our settlement, and there are still among us men who have heard the stories from eye-witnesses of these fearful atrocities.

Arrived at the Central Macdonald punt the Minister for Works, who was driven by Mr. Norton, was met by a large cavalcade of vehicles and horsemen, and after a formal welcome and some cheering the procession started for St. Albans. As it passed the "Central" tennis court, where a match was in progress, the players and spectators

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3 floods, and they got on expeditiously with their work right through 1902, and the close of that year saw the deep tarry water-way in the valley of the St. Albans spanned by an imposing and substantial bridge. The Messrs Ahearn deserve great credit for the faithful way in which they carried out their contract. For years their name has been before the public as contractors for bridges and other public works, and the name of the firm is associated with many of the biggest undertakings carried out under the Department of Public Works. When the bridge was passed by a Government officer at the close of last year, Messrs Ahearn and Son were highly complimented for the capable, careful and honest performance of the contract.

A GALA DAY.

3 People flocked into St. Albans from all points of the compass on Saturday. Some came from Wollombi, riding or driving a distance of over 40 miles. Others came from Mangrove, Wiseman's Ferry, Webb's Creek, and from Sydney. The Minister for Public Works (Hon. E. W. O'Sullivan) accompanied by Mr. John Norton (the Member for Northumberland, which embraces St. Albans), Mr. G. A. Miller (Monaro) and Mr. J. Evans (Deniliquin) arrived in Windsor by train on Friday night, and started on their journey of 38 miles to the scene of the festivities before 8 a.m. on Saturday, in two huggies and pairs provided by Mr. Jesse Cooper. Mr. Brinsley Hall, Member for the Hawkesbury and who was born on the banks of the Macdonald River, left Windsor on Friday night, halting at Wiseman's Ferry about

sights to be seen are so grand and varied that one is more than compensated for the little inconveniences of the trip. First you are bowling along through rich and fertile land, heavily timbered for the most part, but with here and there an orchard that tells eloquently of the thrift and industry of the settlers. The orange trees are literally loaded with golden fruit, and we hope they represent a veritable golden harvest for the owners. Then you pass through belts of poorer land such as is always found on the mountain table tops, with ridges and ravines running off on both sides, away to the shores of the majestic river Hawkesbury, which is now on your right then on your left. You reach the mountain top, and then descending the side you have Wiseman's Ferry right underneath you. The craggy eminences on the left seem to frown upon you, while as you peep over the precipice on the right you involuntarily shudder and keep as close to the cliffs as possible. What a flood of recollections rushes to the mind on the first sight of Wiseman's Ferry! The gruesome horrors of the convict system, when old Sol. Wiseman was the uncrowned king of the Ferry, are brought home vividly when one remembers what he has read of those days, when men were flogged, often for the delectation of those who enjoyed such harrowing sights. Crossing the Ferry we got into conversation with old Jack the puntman. Jack is an admirer of John Norton. He is an interesting character, and what a great reader, and a man who has fixed opinions on most social and political subjects. As we ascended the mountain on the other side of the punt there were many things to remind one

THE PROCESSION.

Arrived at the Central Macdonald punt the Minister for Works, who was driven by Mr. Norton, was met by a large cavalcade of vehicles and horsemen, and after a formal welcome and some cheering the procession started for St. Albans. As it passed the "Central" tennis court, where a match was in progress, the players came down to the road and lustily cheered the Minister and the Member for Northumberland, and Mr. O'Sullivan gracefully returned thanks for this spontaneous and friendly welcome. Then the pace was a merry one along the splendid road and across the new bridge to Mr. James Jurd's hotel, and on arriving there ringing cheers were given by the large crowd assembled.

THE TOWN EN FETE.

St. Albans was gaily decorated with bunting. There was a mass of flags in front of Hoet Jurd's hotel, and the bridge was brightly decked out in flags and greenery. On the centre a triumphal arch had been erected, and on either side the words "Welcome" had been worked in large red letters. This, we understand, was the work of Mrs. Middleton. The upper portions of the bridge were also prettily decorated with flags and greenery. Those who were responsible for the decorative work were Messrs. G. Ambrose, Foley and

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3 bridge had for some time been dangerous, and it was only the want of funds which prevented its erection sooner. However, they had the bridge now, and he thought they would find it very satisfactory, not only for pedestrian traffic, but for heavy teams. (Cheers). He was glad to come back to their picturesque and romantic locality. It was one of the oldest districts in New South Wales, and he was delighted that day to be with the people whose great grandfathers did all the heroic pioneering work of settlement. (Cheers). These grand old pioneers took their lives in their hands, and it gave him peculiar pleasure to meet the sturdy descendants of such men. Settled in such a lovely and fertile spot, they ought to be the happiest people in N.S.W., and he was sure they were. He might tell them that the Government was trying to promote the welfare and happiness of the people. It had a vigorous country policy, and was now a truly country Government, and endeavoured for a fair play to the country, and at the same time not to neglect the city. It was the man in the country who created the wealth, and while Sydney depended wholly on the country, the country could not prosper well without Sydney. (Applause). He was not ashamed of the policy, and thought